

# **RFID subwayticket art**

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**S.U.I.**  
**-Smart Urban Intelligence-**  
**(2006)**

## *Used technology in this work*



A card type of RFID (= “smart card”),  
that is actually and broadly used in Tokyo area

# “SUICA”

## -Super Urban Intelligent Card-

JR's (=Japan Railway Company)  
application service mainly for railway ticket,  
partly for particular e-money



*JR's slogan : "Touch and go!"*

*"sui sui" ---means "verrrry smoothly"*

*And...*

*almost all the people are **seduced** and attracted  
because of its efficiency and **comfort**.*

*But...*

*It's based on **stored** electronic **data**  
that are managed by others  
(=corporation)*

*So it **can be** analyzed by 'others'  
anytime anyplace for the tool for various  
administration / governance.*

“Felica” = name of the RFID protocol



- ISO 18092
- contactless passive RFID (13.56MHz)
- There is particular unencrypted area  
In this card,
  - 20 records (max) of  
history of movement etc. is stored  
and is able to be read out  
with simple C code

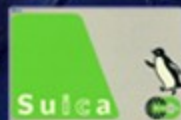
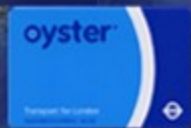
cf.) “MiFare” = name of the RFID protocol



Oyster card (London Subway)

- ISO 14443 Type A
- contactless passive RFID (13.56MHz)
- de-facto standard of smart card
- actually new police tool





# Objective of the work

***To point out --***

***•Ambivalent situation on our existence  
interwoven with digital technology***

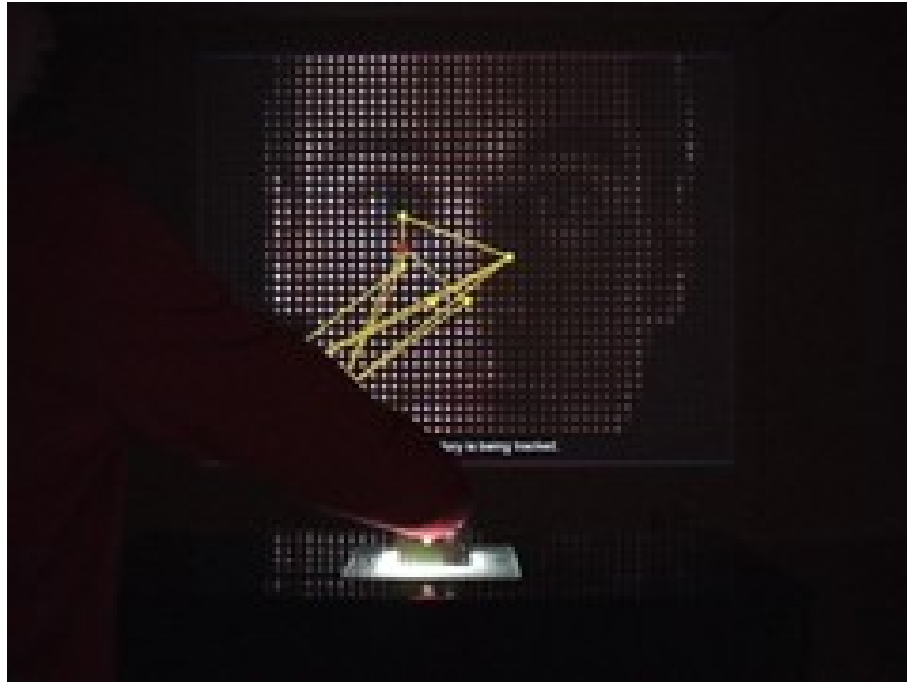
***by using the same technology.***

***•Possibility and dangerousness of  
surveillance of data and  
administration of each individuals***

***Adding to that –***

***•Exploring and understanding  
some strange aspect or characteristics of  
“data”***

## ***“Bot art” using RFID technology***



**Reading the data inside the card  
and automatically interprets them  
with very arbitrary or violent way.**

**= linking the data with AI tech**



## Bot computes and speaks...

1. Card holder's "living place."
  2. Card holder's most "favorite place" to visit,  
and the related intrusive recommendation.
  3. Card holder's records of "returning home," of "staying out overnight" etc.
  4. Card holder's very shortsighted assumed "profile."
  5. Something not worth bothering about each station in the history.
  6. "General information" about the card.
- etc.

## An example of history list inside SUICA

05/2/2006	Harajuku	Matsudo	3200
05/2/2006	Shibuya	Harajuku	120
04/2/2006	Yurakucho	Shibuya	410
04/2/2006	Kanda	Yurakucho	700
04/2/2006	Matsudo	Kanda	830
29/1/2006	Akihabara	Matsudo	410
29/1/2006	Ochanomizu	Tokyo	700
29/1/2006	Akihabara	Ochanomizu	120
29/1/2006	Ueno	Akihabara	330
28/1/2006	Akihabara	Ueno	540
28/1/2006	Shinjuku	Akihabara	990
28/1/2006	Matsudo	Shinjuku	150
22/1/2006	Shibuya	Matsudo	440
22/1/2006	Matsudo	Shibuya	730
21/1/2006	Akihabara	Matsudo	1020
21/1/2006	Matsudo	Akihabara	310

How does the bot interpret the above things  
from this very simple list?

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These are simple example of ....

At least **implicit aspect** of data

Or some “blind spot” of data

“data unconsciousness ?”

Maybe it can be thought of as  
particular unconsciousness-like things  
on data.

But

Bot (automated algorithm) can easily calculate and compute such **implicit** aspects of data, and have a possibility to change them **explicit** ones.